

RYAN SHAW

CB #3360, 100 Manning Hall
Chapel Hill, NC 27599-3360
ryanshaw@unc.edu
<http://aeshin.org/>
919.636.9660

EDUCATION

University of California, Berkeley, School of Information, Berkeley, CA.

Ph.D. in Information Management & Systems with Designated Emphasis in New Media, December 2010. Advisor: Michael Buckland.

University of California, Berkeley, School of Information Management & Systems, Berkeley, CA.

Master's in Information Management & Systems, May 2005. Advisor: Marc Davis.

Stanford University, Stanford, CA.

B.S. in Symbolic Systems, June 1998. Minor in Japanese. Advisor: Daphne Koller.

PROFESSIONAL EXPERIENCE

Univ. of North Carolina at Chapel Hill, School of Information & Library Science 2011–present

Associate professor (since 2016) teaching principles of information organization and studying computational tools for humanist scholarship and how humanist knowledge can inform IT design.

University of California, Berkeley, Context and Relationships 2007–2010

Research assistant investigating how auxiliary resources can be made more readily available with tools for finding, adding, and aggregating contextually relevant links.

University of California, Berkeley, Biography in Context 2007–2010

Research assistant designing and evaluating standards and best practices for encoded mark-up, embedded queries, and associated editing tools to create digital biographical texts.

Centrum Wiskunde & Informatica, Semantic Media Interfaces Summer 2008

Visiting scholar examining the state of the art in RDFS+OWL data models for representing information about events and developed a new model that attempts to address the deficiencies.

Yahoo! Research Labs 2005–2007

Research intern exploring and inventing social media and mobile media technology and applications that enabled people to create, describe, find, share, and remix media on the web.

University of California, Berkeley, Garage Cinema Research 2003–2005

Research assistant designing and developing digital systems for creating and using metadata to automate media production and reuse.

Multimedia Search, Yahoo! Summer 2004

Technical intern investigating ways to identify multimedia objects on the web and associate these objects with descriptive metadata.

- Vanten Open Source Solutions** 2002-2003
Senior developer building enterprise software. Developed specifications, designed architecture, implemented and deployed systems, and trained junior programmers.
- Sentient Health** 2002
Independent consultant helping to develop health care inventory management software. Refined customer specifications, refactored system architecture, trained contract programmers, and coded.
- Silver Egg Technology** 2000-2002
Director of R&D successfully bringing to market a turnkey system for real-time personalization of content. Supervised a team of developers, investigated new technologies, developed prototypes.
- LINC Media** 1998-2000
Software developer designing, developing and launching Japan's first online recruiting site.
- CAPS Logistics** (now SSA Global) 1998
Engineer developing prototypes for a real-time distributed transportation planning system.
- Stanford University**, Daphne Koller's research group 1997-1998
Research assistant building prototypes of object-oriented Bayesian networks integrating probabilistic reasoning with frame-and-slot knowledge bases.

HONORS

- 2022-2024 Frances Carroll McColl Term Professorship**, awarded to recognize faculty who have made notable contributions via research, teaching and service to the School of Information & Library Science.
- 2014 ASIS&T Book of the Year** for *The Discipline of Organizing*, ed. Glushko. I was a principal collaborating author of this information organization textbook, and author of the chapter titled "The Forms of Resource Descriptions." <http://www.asis.org/asist2014/awards.html>
- 2013 Library Juice Paper Contest winner** for "Information organization and the philosophy of history." This award is given by Library Juice Press and is intended "to encourage and reward good work in the field of library and information studies, humanistically understood, through a monetary award and public recognition." <http://libraryjuicepress.com/blog/?p=4331>

REFEREED WORKS

Book chapters

- Shaw, R. 2023. **Worlds in conflict: A dispute over embedding linked data in Web pages**. In *Ethics in Linked Data*, edited by Provo, A., Burlingame, K. and Watson B. M. Library Juice Press.
- Shaw, R. 2020. **Periodization**. In *ISKO Encyclopedia of Knowledge Organization*, edited by Hjørland, B. and Gnoli, C. <https://www.isko.org/cyclo/periodization>. Republished 2023 in *Knowledge Organization* 50(7), 489-495; <https://doi.org/10.5771/0943-7444-2023-7-489>.
- Rabinowitz, A., Shaw, R. and Golden, P. 2018. **Making up for lost time: Digital epigraphy, chronology, and the PeriodO project**. In *Digital Epigraphy*. De Gruyter Open. <https://doi.org/10.1515/9783110607208-017>

- Shaw, R. 2016. **Gazetteers enriched: A conceptual basis for linking gazetteers with other kinds of information.** In *Placing Names: Enriching and Integrating Gazetteers*, edited by Mostern, R., Southall, H., and Berman, M. L. Bloomington: Indiana University Press. Preprint: <https://www.researchgate.net/publication/280578295>
- Shaw, R., Golden, P., and Buckland, M. 2015. **Using linked library data in working research notes.** In *Linked Data and User Interaction*, edited by Cervone, H. F., Kavcic-Colic, A., and Svensson, L. Berlin: De Gruyter. Preprint: <http://metadata.berkeley.edu/UILLD2013shaw.pdf>
- Shaw, R. and Maloney, M. 2013. **The forms of resource descriptions.** In *The Discipline of Organizing*, edited by Glushko, R.J., 283–324. Cambridge, Massachusetts: MIT Press. <https://mitpress.mit.edu/books/discipline-organizing> **2014 ASIS&T Book of the Year**

Journal articles

- An, Y. L. and Shaw, R. Forthcoming 2026. **Temporal reasoning in historical humanities data: The case of Muzio Clementi and the music trade.** *Semantic Web*.
- Shaw, R. 2025. **Conceptual modeling as language design.** *Journal of the Association for Information Science and Technology* 76(2), 353–363. <https://doi.org/10.1002/asi.24739>
- Rabinowitz, A., Shaw, R., Buchanan, S. and Golden, P. 2016. **Making sense of the ways we make sense of the past: the PeriodO project.** *Bulletin of the Institute of Classical Studies* 59 (2). <https://doi.org/10.1111/j.2041-5370.2016.12037.x>
- Shaw, R., Rabinowitz, A., Golden, P. and Kansa, E. 2016. **A sharing-oriented design strategy for networked knowledge organization systems.** *International Journal on Digital Libraries* 17 (1). <https://doi.org/10.1007/s00799-015-0164-0>.
- Golden, P. and Shaw, R. 2016. **Nanopublication beyond the sciences: The PeriodO period gazetteer.** *PeerJ Computer Science* 2:e44. <https://doi.org/10.7717/peerj-cs.44>
- Shaw, R. 2015. **Big data and reality.** *Big Data and Society* 2 (2). <https://doi.org/10.1177/2053951715608877>
- Shaw, R. 2013. **Information organization and the philosophy of history.** *Journal of the American Society for Information Science & Technology* 64 (6). <https://doi.org/10.1002/asi.22843>
- Hjørland, B. and Shaw, R. 2010. **Concepts: Classes and colligation.** *Bulletin of the American Society for Information Science & Technology* 36 (3). <https://doi.org/10.1002/bult.2010.1720360301>
- Shaw, R. 2010. **From facts to judgments: Theorizing history for information science.** *Bulletin of the American Society for Information Science & Technology* 36 (2). <https://doi.org/10.1002/bult.2010.1720360207>

Conference papers

- Shaw, R. 2023. **Sumtiem soon: temporal reasoning in the browser.** Graphs and Networks in the Humanities (Mainz). <https://doi.org/10.6084/m9.figshare.26017849>
- Shaw, R. 2022. **Modeling and reasoning about incomplete, uncertain, and approximate historical dates.** Graphs and Networks in the Humanities (online). <https://doi.org/10.6084/m9.figshare.19948994.v1>
- Shaw, R. 2021. **Querying and reasoning about Extended Dates and Times as Linked Data.** LD4 Conference on Linked Data (online). <https://doi.org/10.13140/RG.2.2.14487.09120>
- Shaw, R. 2019. **The missing profession: toward an institution of critical technical practice.** In *Proc. of the 10th Int'l Conf. on Conceptions of Library and Info. Science* (Ljubljana). <http://informationr.net/ir/24-4/colis/colis1904.html>

- Post, C., Golden, P. and Shaw, R. 2018. **Never the same stream: netomat, XLink, and metaphors of web documents.** In *Proc. of the ACM Sym. on Document Engineering* (Halifax). <https://doi.org/10.1145/3209280.3209530>
- Shaw, R. **Segmenting oral history transcripts.** 19th International Conference on Theory and Practice of Digital Libraries (TPDL 2015). https://doi.org/10.1007/978-3-319-24592-8_27.
- Golden, P., Shaw, R. and Buckland, M. 2014. **Decentralized coordination of controlled vocabularies.** In *Proc. of the 77th ASIS&T Annual Meeting* (Seattle). <https://doi.org/10.1002/meet.2014.14505101146>.
- Shaw, R. and Golden, P. 2013. **Taking entity reconciliation offline.** In *Proc. of the 76th ASIS&T Annual Meeting* (Montreal). <https://doi.org/10.1002/meet.14505001107>.
- Buckland, M., Golden, P., Pateman, B., and Shaw, R. 2013. **Editors' notes: An example of changed mediation.** In *Proc. of the 4th Digital Documents and Society Conference* (Zagreb).
- Shaw, R., Golden, P., and Buckland, M. 2012. **Integrating collaborative bibliography and research.** In *Proc. of the 75th ASIS&T Annual Meeting* (Baltimore). <https://doi.org/10.1002/meet.14504901245>
- Shaw, R. and Buckland, M. 2011. **Editorial control over Linked Data.** 2011. In *Proc. of the 74th ASIS&T Annual Meeting* (New Orleans). <https://doi.org/10.1002/meet.2011.14504801296>
- Buckland, M., Shaw, R. and Melia, D. 2010. **Rapid access to reference resources.** In *Proc. of the 73rd ASIS&T Annual Meeting* (Pittsburgh). <https://doi.org/10.1002/meet.14504701427>
- Troncy, R., Shaw, R., and Hardman, L. 2010. **LODE: une ontologie pour représenter des événements dans le web de données.** In *21es Journées Francophones d'Ingénierie des Connaissances* (Nîmes). <http://hal.archives-ouvertes.fr/hal-00487630/>
- Shaw, R., Troncy, R., and Hardman, L. 2009. **LODE: Linking open descriptions of events.** In *Proc. of the 4th Asian Semantic Web Conference* (Shanghai). https://doi.org/10.1007/978-3-642-10871-6_11
- Larson, R. and Shaw, R. 2009. **Mapping life events: temporal and geographic context for biographical information.** In *Proc. of the 9th ACM/IEEE-CS Joint Conf. on Digital Libraries* (Austin). <https://doi.org/10.1145/1555400.1555519>
- Buckland, M., Melia, D. and Shaw, R. 2009. **Contexte et connexions: L'Irlande et le patrimoine irlandais.** In *Patrimoine 3.0: Actes du douzième colloque international sur le document électronique* (Montreal). <https://web.archive.org/web/20240702221247/https://aeshin.org...>
- Buckland, M., Larson, R., and Shaw, R. 2009. **Finding explanations online: Easy queries AND trustworthy answers.** In *Proc. of the 72nd ASIS&T Annual Meeting* (Vancouver). <https://doi.org/10.1002/meet.2009.1450460344>
- Shaw, R. and Buckland, M. 2008. **Open identification and linking of the four Ws.** In *Proc. of the 9th Intl. Conf. on Dublin Core and Metadata Applications* (Berlin). <http://dcpapers.dublincore.org/pubs/article/view/942>
- Shaw, R. and Larson, R. 2008. **Event representation in temporal and geographic context.** In *Proc. of the 12th European Conf. on Research and Advanced Technology for Digital Libraries* (Aarhus). https://doi.org/10.1007/978-3-540-87599-4_50
- Shaw, R. and Larson, R. 2008. **Bringing lives to light: Lives and event representation in temporal and geographic context.** In *Proc. of the 8th ACM/IEEE Joint Conf. on Digital Libraries* (Pittsburgh). <https://doi.org/10.1145/1378889.1378981>
- Buckland, M. and Shaw, R. 2008. **4W vocabulary mapping across diverse reference genres.** In *Proc. of the 10th ISKO Conference* (Montreal). <https://web.archive.org/web/202303292026...>
- Buckland, M., Larson, R., and Shaw, R. 2008. **Finding and providing context online.** In *Proc. of the 71st ASIS&T Annual Meeting* (Columbus). <https://doi.org/10.1002/meet.2008.14504503146>

- Gey, F., Shaw, R., Larson, R., and Pateman, B. 2008. **Biography as events in time and space**. In *Proc. of the 16th Intl. ACM Conf. on Advances in GIS* (Irvine, CA). <https://doi.org/10.1145/1463434.1463535>
- Shaw, R. 2006. **Recognition markets and visual privacy**. In *UnBlinking: New Perspectives on Visual Privacy in the 21st Century* (Berkeley). <https://web.archive.org/web/20150910203519...>
- Schmitz, P., Shafton, P., Shaw, R., Tripodi, S., Williams, B., and Yang, J. 2006. **International remix: video editing for the web**. In *Proc. of the 14th Intl. ACM Conf. on Multimedia* (Santa Barbara). <https://doi.org/10.1145/1180639.1180814>
- Shaw, R. and Davis, M. 2005. **Toward emergent representations for video**. In *Proc. of the 13th Intl. ACM Conf. on Multimedia* (Singapore). <https://doi.org/10.1145/1101149.1101244>
- Niemeyer, G., Perkel, D., Shaw, R., and McGonigal, J. 2005. **Organum: individual presence through collaborative play**. In *Proc. of the 13th Intl. ACM Conf. on Multimedia* (Singapore). <https://doi.org/10.1145/1101149.1101286>

Workshop papers

- Shaw, R. 2019. **A dispute over the value of semantically enhanced HTML**. Schemas, Graphs, Ontologies: Baking Semantics into Data-Driven Media Technologies panel, 4S annual meeting (New Orleans). <https://go.unc.edu/f3K8N>
- Golden, P. and Shaw, R. **Period assertion as nanopublication**. 2015. Semantics, Analytics, Visualisation: Enhancing Scholarly Data Workshop co-located with the 24th International World Wide Web Conference (Florence). <https://dl.acm.org/citation.cfm?id=2742021>
- Shaw, R., Golden, P., and Buckland, M. 2013. **Using linked library data in working research notes**. Workshop on User Interaction built on Library Linked Data (UILLD). Pre-conference to the 79th World Library and Information Conference (Singapore). <https://web.archive.org...>
- Shaw, R. 2013. **A semantic tool for historical events**. 1st Workshop on EVENTS: Definition, Detection, Coreference, and Representation. NAACL HLT 2013 (Atlanta). <http://anthology.aclweb.org/W/W13/W13-1205.pdf>
- Chen, A., Yoon, A., and Shaw, R. 2012. **People, places and emotions: Visually representing historical context in oral testimonies**. In *Proc. of the LREC 2012 Workshop on Computational Models of Narrative* (Istanbul). <https://web.archive.org/web/20141225235332...>
- Shaw, R., Buckland, M., and Larson, R. 2009. **Integrating tools for synthesis into digital libraries**. In *Proc. of the JCDL 2009 Workshop on Integrating Digital Library Content with Computational Tools and Services* (Austin). <https://web.archive.org/web/20230329184902...>
- Shaw, R. 2008. **Event gazetteers for navigating humanities resources**. In *Proc. of the 2nd PhD Workshop on Information and Knowledge Management* (Napa Valley). <https://doi.org/10.1145/1458550.1458567>
- Gey, F., Shaw, R., Larson, R., Buckland, M., Pateman, B., and Melia, D. 2008. **Marking up cultural materials for time and geography**. In *Proc. of the ECDL Workshop on Information Access to Cultural Heritage* (Aarhus). <http://ilps.science.uva.nl/IACH2008/proceedings/proceedings.html>
- Shamma, D., Shaw, R., Shafton, P., and Liu, Y. 2007. **Watch what I watch: using community activity to understand content**. In *Proc. of the 9th Intl. ACM Workshop on Multimedia Information Retrieval* (Augsburg, Germany). <https://doi.org/10.1145/1290082.1290120>
- Shamma, D. and Shaw, R. 2007. **Supporting creative acts beyond dissemination**. In *Proc. of the 6th ACM SIGCHI Conf. on Creativity & Cognition* (Washington, D.C.). <https://doi.org/10.1145/1254960.1255012>

- Shaw, R. and Schmitz, P. 2006. **Community annotation and remix: a research platform and pilot deployment.** In *Proc. of the 1st Intl. ACM Workshop on Human-Centered Multimedia* (Santa Barbara). <https://doi.org/10.1145/1178745.1178761>
- Shaw, R. 2005. **Designing for community appropriation of media.** In *Proc. of the CHI 2005 Workshop on Designing Technology for Community Appropriation* (Portland, Oregon). <http://www.tii.se/reform/events/chi/>
- Feinberg, M. and Shaw, R. 2004. **Action: A framework for semantic annotation of events in video.** In *Proc. of the 4th Intl. Workshop on Knowledge Markup and Semantic Annotation* (Hiroshima). <https://web.archive.org/web/20201103233903/http://sunsite.informatik.rwth...>

Oral presentations of unpublished papers

- Shaw, R. 2020. **Undergraduate informatics education at the University of North Carolina.** PIT-UN Undergraduate Informatics Education Conference (Austin, Texas).
- Shaw, R., Rabinowitz, A., and Golden, P. 2018. **A deep gazetteer of time periods.** Extended abstract in *Proc. of Digital Humanities 2018* (Mexico City). <https://dh2018.adho.org/en/a-deep-gazetteer-of-time-periods/>
- Shaw, R. 2014 **Small data research infrastructure: Designing for autonomy.** International Symposium on Grids and Clouds (Taipei).
- Shaw, R., Buckland, M., and Golden, P. 2013. **Linked data for working notes on chronology.** Pacific Neighborhood Consortium 2013 Annual Conference (Kyoto).
- Shaw, R., Buckland, M., and Golden, P. 2013. **Open notebook humanities: Promise and problems.** Extended abstract in *Proc. of Digital Humanities 2013* (Lincoln, Nebraska). <http://dh2013.unl.edu/abstracts/ab-297.html>
- Ven den Heuvel, C., Van Zundert, J., Brumfield, B., Van Dalen-Oskam, K, Franzini, G., Sahle, P., Shaw, R., and Terras, M. 2012. **Text theory, digital document, and the practice of digital editions.** Abstract in *Proc. of Digital Humanities 2013* (Lincoln, Nebraska). <http://dh2013.unl.edu/abstracts/ab-169.html>
- Shaw, R. 2012. **PeriodO: an online gazetteer for periodization of the past.** Pacific Neighborhood Consortium 2012 Annual Conference (Berkeley, California). <http://www.pnclink.org/pnc2012/english/>
- Shaw, R. 2012. **Contours of the past: Computationally exploring civil rights histories.** Extended abstract in *Proc. of Digital Humanities 2012* (Hamburg). <https://web.archive.org...>
- Shaw, R. 2011. **Breaking the historian's code: Finding patterns of historical representation.** Representing Knowledge in the Digital Humanities (Lawrence, Kansas). <http://idrh.ku.edu/calendar/events/representing-knowledge-conference/>
- Meeks, E., Mostern, R., Grossner, K., Shaw, R., and Kantabutra, V. 2011. **Modeling event-based historical narratives.** Abstract in *Proc. of Digital Humanities 2011* (Stanford, California). <http://dh2011abstracts.stanford.edu/xtf/view?docId=tei/ab-233.xml>

Panels and workshops organized

- 2017 PeriodO Workshop**, Chapel Hill, December 18–19, 2017. <http://perio.do/2017-workshop/>
- 2016 PeriodO Workshop**, Austin, August 22–24, 2016. <http://perio.do/2016-workshop/>
- Changing Publishing Practices in iSchools**, 2014 iConference, Berlin, March 4, 2014. <https://www.ideals.illinois.edu/handle/2142/47248>
- Digital Humanities (in | and | vs.) iSchools?**, 2012 iConference, Toronto, February 7–10, 2012. <http://aeshin.org/dhmeetsi/>

Supporting Creative Acts Beyond Dissemination, 6th Creativity & Cognition Conference, Washington, D.C., June 13–15, 2007. <http://shamurai.com/sites/creativity/>

Other refereed works

Scheinfeldt, T. and Shaw, R. 2012. **Words and code**. *Journal of Digital Humanities* 1 (1). <https://web.archive.org/web/20121110033038/http://journalofdigitalhumanities.org/1-1/words-and-code-by-tom-scheinfeld-and-ryan-shaw/>

NON-REFEREED WORKS

Dissertation

Shaw, R. 2010. **Events and periods as concepts for organizing historical knowledge**. Ph.D. thesis, University of California, Berkeley. <http://aeshin.org/dissertation/>

Master's thesis

Shaw, R. 2005. **Media Streams Metadata Exchange: User study and initial requirements**. MIMS thesis, University of California, Berkeley. <https://doi.org/10.6084/m9.figshare.13309040>

Patents filed

Shaw, R., Schmitz, P., Shafton, P., and Williams, B. 2007. **Identifying popular segments of media objects**. U.S. patent 10,282,425 B2, filed March 19, 2007, granted May 7, 2019. <https://patents.google.com/patent/US10282425B2>

Shafton, P., Shamma, D., Shaw, R. and Schmitz, P. 2007. **Method and system for media-based event generation**. U.S. patent 9,542,394 B2, filed June 14, 2007, granted January 10, 2017. <https://patents.google.com/patent/US9542394B2>

Shafton, P., Shamma, D., Shaw, R. and Schmitz, P. 2007. **Method and system for personalized segmentation and indexing of media**. U.S. patent application 11/763,388, filed June 14, 2007, subsequently abandoned. <https://patents.google.com/patent/US20080313541>

Technical reports

Shaw, R. 2015. **Automatically segmenting oral history transcripts**. arXiv.org preprint. <http://arxiv.org/abs/1509.08842>

Shaw, R. and Wilde, E. 2007. **Web-style multimedia annotations**. UCB iSchool report 2007-014. <http://escholarship.org/uc/item/42q341g6>

Book reviews

Shaw, R. 2021. **Review of Bernhard Rieder, *Engines of Order: A Mechanology of Algorithmic Techniques***. *Journal of the Association for Information Science & Technology* 72 (8), 1092–1095. <https://doi.org/10.1002/asi.24462>

Shaw, R. 2007. **Review of Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism***. *Business History* 49 (5), 754–760. <https://doi.org/10.1080/00076790701428778>

Invited talks, presentations, and panels

The liberal arts of data science. Presentation for the 2024 ASIST&T AM panel “Scholarship for the people: Michael K. Buckland and information science.” <https://doi.org/10.1002/praz.1088>

Three foundational myths of data science. Invited lecture for the School of Management Science and Engineering, Central University of Finance and Economics, Beijing, May 27, 2022. <http://mse.cufe.edu.cn/info/1441/8694.htm>

How to care about information. UC Berkeley Information School’s Information Access Seminar, April 2, 2021. <https://www.ischool.berkeley.edu/events/2021/how-care-about-information>

Conceptual models as diplomatic languages. Keynote at ASIS&T Workshop on Conceptual Models of the Sociotechnical, October 23, 2020. <https://doi.org/10.6084/m9.figshare.13176788.v1>

An archaeology of knowledge graphs. Panel discussion at the U.S. Semantic Technologies Symposium, Durham, NC, March 11, 2019. <http://us2ts.org/2019/>

A gazetteer for time periods. International Workshop on Spatiotemporal Knowledge, Academia Sinica, Taipei, May 24–25, 2018.

Space and time. Panel discussion at the U.S. Semantic Technologies Symposium, Dayton, Ohio, March 2, 2018. <http://us2ts.org/2018>

A citizen’s guide to big data. Panel discussion at the UNC Friday Center, Sept. 28, 2017. <https://sils.unc.edu/news/2017/citizens-guide-to-big-data>

Collaborative, distributed curation of gazetteer data: the PeriodO project. Pacific Neighborhood Consortium Annual Conference, Los Angeles, Aug. 17, 2016. <https://web.archive.org/web/20160811043237/http://www.pnclink.org/pnc2016/program...>

Hybrid online/offline scholarly information resources. Coalition for Networked Information Fall 2015 Meeting, Washington, DC, Dec. 15, 2015. <https://web.archive.org...>

Report on & demonstration of the PeriodO period gazetteer. 14th European Networked Knowledge Organization Systems Workshop, Poznań, Sept. 18, 2015. <https://web.archive.org...>

An ecosystem of time periods: PeriodO. Linked Pasts colloquium, Pelagios project, King’s College London, July 20, 2015. <http://pelagios-project.blogspot.com/2015/03/linked-pasts.html>

Sorry things are such a mess: Computational text analysis in practice. DH Speaker Series, WFU Humanities Institute, Wake Forest, NC, February 13, 2015.

Pluri, multi-, trans-, meta- and interdisciplinary nature of LIS. Does it really matter? ASIS&T Annual Meeting, Seattle, Nov. 2014. <https://doi.org/10.1002/meet.2014.14505101010>

Humanidades digitales. InnovaTics 2014, DUOC Universidad Católica, Santiago, Chile, August 27, 2014. <http://congresoinnovatic.org/content/ryan-shaw-university-north-carolina-chapel-hill>

Desafíos de las humanidades digitales para el siglo XXI [Digital Humanities Challenges for the 21st Century]. Salón de Honor de Casa Central UC, Pontificia Universidad Católica de Chile, Santiago, Chile, August 25, 2014. <https://www.youtube.com/watch?v=Ylc7QbOi1WY>

Editors’ Notes for the Maritime Buddhism project. ECAI workshop, International Symposium on Grids and Clouds, Academia Sinica, Taipei, March 24, 2014.

Openly documenting Korea’s texts. Korean Studies Technologies workshop, Sogang University, Seoul, Korea, December 6, 2013.

Web access to editors’ working notes. School of Communication and Information, Rutgers University, New Brunswick, NJ, September 16, 2013.

Using linked library data in working research notes. Summer international colloquium, Research Center for Knowledge Communities, University of Tsukuba, Japan, August 7, 2013.

Topically segmenting oral histories. UNC Scholarly Communications Working Group, Chapel Hill, NC, April 10, 2013.

Taking scholarly note-taking to the Web. Coalition for Networked Information Spring 2013 Meeting, San Antonio, TX, April 4, 2013. <https://web.archive.org/web/20130325060751...>

Research in the digital age: Text-mining as a research tool in the humanities and social sciences. Duke Graduate School RCR Forum, Durham, NC, March 5, 2013. <https://web.archive.org/web/20130308215823/http://gradschool.duke.edu...>

Mining oral histories for multiple audiences. Duke Libraries Digital Scholarship Text > Data series, Durham, NC, February 18, 2013. <https://web.archive.org/web/20210416220437...>

Text-mining as a research tool in the humanities and social sciences. Duke Libraries Digital Scholarship Text > Data series, Durham, NC, September 20, 2012. <http://sites.duke.edu/digital/text-data-series/>

Research in the digital age: Text-mining as a research tool in the humanities and social sciences. Duke Graduate School RCR Forum, Durham, NC, March 23, 2012. <https://web.archive.org/web/20120307232352/http://gradschool.duke.edu...>

Event as data: Conceptual infrastructure for history. Duke Libraries, Durham, NC, April 27, 2011. <http://library.duke.edu/news/main/2011/article56.html>

Time traveling: Interfaces for geotemporal visualization. Panel at South by Southwest Interactive, Austin, Texas, March 12, 2011. http://schedule.sxsw.com/2011/events/event_IAP6627

From facts to judgments: Theorizing history for information science, Narratives, Facts, and Events in the Foundations of Info. Science, ASIS&T Annual Meeting, Vancouver, Nov. 10, 2009. <https://doi.org/10.1002/meet.2009.1450460114>

Events, facts, and narratives, Event Webs: Constructs, Connections, Causalities, HumaniTech® Symposium, Irvine, California, May 9, 2008. <http://www.humanities.uci.edu/humanitech/eventwebs.html>

Meta-events, Distributed Participation panel at the ParaSite New Media Symposium, Berkeley, California, October 26, 2007.

Biographical mark-up, PNC and ECAI Annual Conference and Joint Meetings, Berkeley, California, October 20, 2007.

Archiving the present, Archives and Databases panel at session on STS and Information Studies organized by Geof Bowker and Jean-François Blanchette, 4S Annual Meeting, Montreal, Quebec, October 11, 2007.

Composting the archives, Decasia panel, 4S Annual Meeting, Vancouver, B.C., November 2, 2006.

New media projects

Continuous City, a collaboration with The Builder's Association, is an ongoing new media theater production that extends beyond the theater through a web site where videos can be recorded for the performance.

Organum: Away from the New (a.k.a. Good Morning Flowers) was exhibited in the Pocket Cinema program at the 2006 San Francisco International Film Festival and at Cairo's Townhouse Gallery in May 2006.

International Remix, a collaboration with Yahoo! Research Berkeley and the Institute for Next Generation Internet, was a web-based tool for re-editing selected films from the San Francisco International Film Festival.

Trace, a collaboration with media artist Alison Sant, examined the intersection of wireless networks and urban space. Trace was presented at the 2004 VIPER Festival in Basel, UbiComp 2005 in Tokyo, ISEA2006 in San Jose, and the 2006 Conflux Festival in New York.

Organum Playtest, a collaboration with Greg Niemeyer and Dan Perkel, was a 3D game played by singing. In 2005 it was played at the New Langton Arts gallery and the Mission Creek Festival in SF, at the PoV Alternative Games Exhibition in Vancouver, at the Resfest festival, and at The Art Formerly Known As New Media in Banff.

TEACHING EXPERIENCE

Courses taught during the past three years

Spring 2026	INLS 560 Programming for Information Pros	(17 students)
	INLS 696-186 Building a Graph of Artists' Books	(1 student)
Fall 2025	INLS 560 Programming for Information Pros	(16 students)
	INLS 620 Web Information Organization	(12 students)
Spring 2025	INLS 560 Programming for Information Pros	(19 students)
	INLS 690-186 Distributed Knowledge Graphs II	(8 students)
Fall 2024	INLS 560 Programming for Information Pros	(26 students)
	INLS 620 Web Information Organization	(24 students)
Spring 2024	INLS 201 Foundations of Information Science	(118 students)
	INLS 560 Programming for Information Pros	(23 students)
Fall 2023	INLS 201 Foundations of Information Science	(120 students)
	INLS 620 Web Information Organization	(20 students)

Ph.D. dissertation committees

Robert Manzo (UNC 2026, chair)	What makes autistic autobiographies informative: A study of autistic subjectivities through autobiographical narratives
Eliscia Kinder (UNC 2025, chair)	Making and unmaking the record(s): Witness evidence and boundary making processes in Ireland's Mother and Baby Homes Commission of Investigation
Erin Dickey (UNC 2024)	"Bad Information": Networks, knowledges, and feminist art in the 1980s
Jewell Thomas (UNC 2024)	Digital reading: A computational approach to literary studies with applications in British literary history
Melissa Dollman (UNC 2021)	Changing lanes: A reanimation of Shell Oil's Carol Lane
Deborah Maron (UNC 2021, chair)	The standpoint practitioner: How Black and White metadata librarians at predominantly White academic libraries articulate personal, professional, and social experiences relating to their work with African-American collections

Evan Donahue (Duke 2021)	Android linguistics: How machines do things with words
Elliott Hauser (UNC 2020, chair)	Making certain: Information and social reality
Colin Post (UNC 2020)	Networked alternatives: Digital curation and artistic production on artist-run platforms
Sarah Beth Nelson (UNC 2019)	Coming out of our shells: Safety and vulnerability in reality storytelling
Samantha Kaplan (UNC 2018, chair)	The everyday life and information practices of a natural immunity advocate
Alex Chassanoff (UNC 2016)	Historians' use of digital photographs as visual evidence
Sumayya Ahmed (UNC 2016)	Disclosure and documentary heritage: the Hassan II Prize for Manuscripts and Archival Documents in post-colonial Morocco
Alex Poole (UNC 2015)	Digital humanists and the imperative for digital curation education

Master's papers supervised

Spring 2025	Kate Phillips (MSIS) Links between representations for digitized archival objects
Spring 2025	William Hahn (MSIS) Cyberattack sense-making methods: Comparing the Capital One and Internet Archive data breach Reddit user discussions
	Yijia Qi (MSIS) Balancing preservation and deletion: Exploring data retention practices in Dataverse installations
	Colton Richard (MSIS) Linked literary data: Evaluating narrative ontologies for distant reading
	Courtney Thomas (MSIS) Counter-tours at U.S. universities: Strategies, techniques, and the collective remembrance landscape
Spring 2024	Megan Cross (MSIS) Linked open data and ontology trends in the cultural heritage sector
	Adam Hudnut-Beumler (MSIS) Relationship matters: An exploration of participatory linked data as decolonial archival praxis
	Alex Martin (MSIS) Nonhierarchical crowdsourced database users: iNaturalist participant trust and motivation through an anarchist lens
Fall 2022	Ali Alrabeah (MSIS) Remixed and remastered: A redesign and implementation of the playlist logging system at WXYC – 89.3FM
	Nathanael Nihart (MSIS) Digital humanities techniques for asylum studies in the archive
	Corinne Foster (MSIS) A historical gazetteer of American summer camps

- Spring 2022 Jed Standen (MSLS)
Oral history as poetry: Re-embodying the archives through creative means
- Spring 2021 Megan Kean (MSLS)
Digital materiality: The interpretation of an archival record's material information through its digital surrogate
Allison Kittinger (MSLS)
A "special chronicle" of multilingual digital crowdsourcing
Zhu Li (MSLS)
An analysis of two ontologies of philosophy
Jeffrey Robbins (MSIS)
Material similarity expectations of digitally rendered place representations
Ashley Werlinich (MSLS)
Teaching with mass-market paperbacks
- Spring 2020 Charles Higgins (MSIS)
Comparing usability of text-based and image-based CAPTCHAs
Rui Hou (MSIS)
Development of a web application of social networking for college students
Brittany McCarver (MSLS)
A historical case study of the Pullman Palace Car Company Library
Katherine Trathen (MSLS)
Archives in context: A content analysis of how archives' websites explain finding aids
Wuyan Yao (MSLS)
Digital humanities pedagogy in academic libraries in the Research Triangle
Yuxiao Yao (MSIS)
Development of an administration system for a social networking website
Bo Zhou (MSIS)
The Design and development of a new interactive publication management system for Renaissance Computing Institute
- Fall 2019 Leah Epting (MSIS)
The product is the process: Visualization of archival documents in the digital humanities
- Spring 2019 Yaxue Guo (MSIS)
ConnectCollege: Build a web application promoting instant social networking based on places for college students
Rebecca Mullins (MSLS)
Three-dimensional modeling usage in higher institution classrooms
Kun Qian (MSIS)
Data visualization in the web-based platform: Comparisons of different techniques / data formats that suit web information design and their development
Kimberly Reisler (MSLS, Dean's Achievement Award)
Cognitive authority and the Christian worldview: An examination of Goodreads reviews of Christian books
Elizabeth Stillwell (MSLS)
Digital collection evaluation: A rubric for holistic evaluation

- Fall 2018 Yuhe Ding (MSIS)
Post-click conversion rate predictive model on e-commerce recommender system
- Ayla Toussaint (MSLS)
Finding a way through the crowd: How keyword choices affect discoverability in crowdsourced archival tagging
- Spring 2018 Jennifer Embree (MSLS)
Archiving memory during times of conflict through non-traditional methods: A case study on digital humanities projects Manar al-Athar and Project Syria
- Xueli Fan (MSIS)
Track co-occurrence analysis of user's music listening history
- Jessica Kincaid (MSIS)
Support for digital humanities in academic research libraries: Case studies in special collections
- Devon Murphy (MSIS)
The information worlds of art museum curators and registrars: An institutional ethnography of practice in North Carolina institutions
- Fall 2017 Mara West (MSLS)
A review of subject indexing and social tagging projects in art museums
- Spring 2017 Erin Dickey (MSIS, Dean's Achievement Award)
"Her own version of history": A case study of the Guerrilla Girls oral histories at the Archives of American Art, Smithsonian Institution
- Adam Griggs (MSLS)
Ongoing services in the digital humanities: A user assessment of Project Vox
- Daniel Hawkins (MSLS)
Low cost 3D modeling for cultural institutions
- David Tenenholtz (MSIS)
A complex Web: Upgrading linked data in digital repositories
- Spring 2016 Huiying Ma (MSIS)
Implementation of an event-based business document indexing and retrieving system
- Fall 2015 Madeline Coven (MSIS)
Toward a visual language for abstract ideas: Effect of concepts on perception of symbols
- Summer 2015 Xuxiang Mao (MSIS)
Oral history topic modeling using MALLET and Termite
- Spring 2015 Joy Jones (MSLS)
We share what we are: user contributions and annotations in digital contributory archives
- Aaron Kirschenfeld (MSIS, Dean's Achievement Award)
Yellow fever: Describing negative legal precedent in citators
- Morgan McKeenan (MSLS)
Collecting and documenting faculty and student artwork in institutional repositories in U.S. colleges and universities

- Fall 2014 Stacy Gilbert (MSLS)
As seen on TV and in the archive: A comparison of television shows in the Library of Congress Online Catalog, YouTube, and the Internet Archive
- Spring 2014 Simon O’Riordan (MSLS)
Tracing footsteps: A HGIS project mapping out liturgical processions in 9th and 10th century Constantinople
- Summer 2013 Nathalie Baudrand (MSIS)
Usability Testing of the North Carolina Digital Heritage Center's Website, DigitalNC.org
- Spring 2013 Tim Elfenbein (MSIS)
Metadata pragmatics: Toward a unified semiotic framework
- Kristi Krueger (MSLS)
A case study of assertions for the Iron Age and implications for temporal metadata creation
- Jennifer Martin (MSLS)
Crowd-based information organization: A case study of the folk ontologies in Wikipedia and TV Tropes
- Matthew Poland (MSIS)
History Lab: Designing and evaluating an application for teaching historical reasoning
- Fall 2012 Sarah Lippincott (MSLS)
An exploratory study of the information behavior of users of oral histories
- Spring 2012 Matthew Belskie (MSIS)
Analysis of interactive design elements in a practical application of gamification to learning: Khan academy
- Dana Brand (MSIS)
Fandom, creativity, and interactions
- Elizabeth Coleman (MSLS)
There’s science in my fiction! and other troubles: How a recommender system can help the academic library
- Rachel Tennant (MSIS)
The influence of technology on the academic study of biblical texts
- Maryellen Tinsley (MSLS)
Kress Fellows for Applied Research at the Ackland Art Museum: A case study of collaboration
- Peter Zasowski (MSIS)
Putting museums on the map: A digital humanities project
- Fall 2011 Suzanne Huffman (MSLS)
A content analysis of art museum library websites
- Summer 2011 Alexandra Beaton (MSLS)
#kanyeshrug: Kanye West’s tweets as an example of Twitter as a performative text
- Kate Finley (MSLS)
Tagging feminist books: Implications for subject access
- Spring 2011 Carolyn Pennow (MSLS)
Finding Propertius: Access to European Medieval manuscripts

Undergraduate honors theses supervised

2018 Cami Goray (highest honors)
The impact of social norms on users' smartphone notifications management strategies

GRANTS

A Digital Gazetteer of North Carolina 2019–2022

Instructor. Funded by a \$15,174 Course-based Undergraduate Research Experience (CURE) course development grant from the UNC Quality Enhancement Program, I am teaching a new course in which the students and I cooperatively build a digital gazetteer of North Carolina places.

Periods, Organized (PeriodO) 2014–2019

Co-principal investigator. Funded by an initial \$54,096 Digital Humanities Start-Up Grant from the NEH and a subsequent \$237,744 National Leadership Grant from the Institute of Museum and Library Services, the PeriodO project is creating a gazetteer of scholarly assertions about the spatial and temporal extents of historical periods, to ease the task of linking datasets that define periods differently and to provides tools for understanding these differences.

Contours of the Past: Event-Oriented Access to History 2012–2016

Principal investigator. Funded by a \$218,063 Laura Bush 21st Century Librarian Program Early Career Development grant from the Institute of Museum and Library Services, this project is exploring how to model narrative structure for linking and comparing oral and written histories.

Editorial Practices and the Web 2010–2016

Chief scientist. Funded by two successive grants (\$400,000 and \$486,000) from the Mellon Foundation, this project investigates how documentary editors and other humanities scholars can use the Web to make their work available more quickly, more fully, and more widely.

The Event Directory: A Semantic Tool for Events and Periods 2011–2012

Principal investigator. Funded by a \$10,000 Eleanor M. and Frederick G. Kilgour Research Grant from the School of Information and Library Science, this project explored the use of natural language processing techniques to identify events in historical texts.

PROFESSIONAL SERVICE TO DISCIPLINES

Universities

University of Pittsburgh Promotion external reviewer (2023)
University of Washington Promotion external reviewer (2022)

Funding agencies

Institute of Museum and Library Services Field reviewer (2014, 2016)
Netherlands Organisation for Scientific Research Reviewer (2016, 2020)
Czech Science Foundation Reviewer (2020)

Networks

Pelagios Network Time Activity

Coordinator (2023–26)

Book publishers

Emerald Group Publishing

Reviewer (2015)

MIT Press

Reviewer (2012, 2021, 2024)

Library Juice Press

Paper contest judge (2014)

Oxford University Press

Reviewer (2025)

Routledge

Reviewer (2021)

Journals

Big Data & Society

Reviewer (2017, 2025)

Digital Humanities Quarterly

Reviewer (2015–25)

Information & Culture

Reviewer (2020)

Information Processing & Management

Reviewer (2014)

International Journal on Digital Libraries

Reviewer (2016–17)

Journal of the Assoc. for Info. Science and Technology

Reviewer (2015–24)

Journal of Documentation

Reviewer (2020)

Journal of Web Semantics

Reviewer (2012)

Journal on Computing and Cultural Heritage

Reviewer (2011–12)

New Review of Hypermedia and Multimedia

Reviewer (2017)

PeerJ Computer Science

Reviewer (2020)

Conferences

ACM Conf. on Human Factors in Computing (CHI)

Reviewer (2012, 2016)

ACM Conf. on Human Info. Interact. & Retrieval (CHIIR)

Local organizing co-chair (2016)

ACM Symposium on Document Engineering (DocEng)

Program committee (2012–22)

Assoc. for Info. Science & Technology (ASIS&T)

Reviewer (2009–26)

Conf. on Cooperative Information Systems (CoopIS)

Reviewer (2025)

Digital Humanities Conference

Reviewer (2012–26)

Dublin Core and Metadata Applications (DC)

Program committee (2011–19)

Extended Semantic Web Conference (ESWC)

Program committee (2012)

Graphs and Networks in the Humanities (GraphNR)

Reviewer (2023)

iConference

Reviewer (2011–26),
doctoral colloquium mentor (2022)

N. American Symposium on Knowledge Org. (NASKO)

Doctoral colloquium mentor (2021)

Symposium on Wikis and Open Collaboration (WikiSym)

Program committee (2013)

World Wide Web Conference

Program committee (2012–14)

Workshops

Events in the Semantic Web (ISWC)	Program committee (2011–15)
Humanities in the Semantic Web (ISWC)	Program committee (2017)
Networked Knowledge Organization Systems (NKOS)	Program committee (2016–18)
Semantic Web Tech. for Libraries and Readers (JC DL)	Program committee (2011)

PROFESSIONAL SERVICE WITHIN UNC-CHAPEL HILL

Data@Carolina, Data Science Initiative	UG curriculum working group (2016, 2019)
Carolina Digital Humanities Initiative	Faculty steering committee (2012–18)
	Data studies working group (2015–16)
	DIL/IAH Fellows selection comm. (2014)
	Grad. curriculum committee (2013–14)
General Education Committee	Communication course expert panel (2018)
Graduate School	Summer research fellowship reviews (2026)
School of Data Science and Society	BA curriculum committee (2023)
School of Information and Library Science	Dir. of undergraduate studies (2016–22)
	Curric. review steering comm. (2018–19)
	Faculty search comm. (2014, 2017, 2019)
	Admin. advisory board (2011–14, 2018–20)
	Program architecture task force (2016)
	Master's committee (2011–13, 2015–16)
	Personnel committee (2013, 2023–24)
	Faculty salary committee (2012–13)
	Bylaws committee (2024–2025)
	Faculty affairs committee (2025–2026)
	Program renovation committee (2026)
Scholarly Communications Working Group	Program committee (2011–13)
UNC Research Office of Research Development	Carnegie Fellows review comm. (2017–19)